

Equations Review Assignment

Solve each equation. Pick 2 equations to show your CHECK and 2 equations to show your JUSTIFICATION for each step.

1) $-56 = 4 - 3m$

2) $-8 = \frac{x}{8} - 10$

3) $-8 = 4(4 + x)$

4) $108 = -6(-8 + x)$

5) $1 - 5x = -15 - 3x$

6) $1 - 4x = -13 - 6x$

7) $\frac{-10 + x}{12} = -2$

8) $-3 = \frac{x - 8}{3}$

9) $\frac{n}{n - 3} = \frac{9}{4}$

10) $\frac{6}{p + 4} = \frac{2}{p + 6}$

11) $-2(1 - x) = -2 - 5(x + 7)$

12) $1 - 2x + 5x - 8 = -6(8 + 3x) + 8(1 + 4x)$

Solve each equation. Use the LCM fraction trick.

$$13) \frac{7}{3} - \frac{1}{3}b = \frac{7}{4}$$

$$14) -\frac{10}{3}k + 2 = \frac{26}{3}$$

Solve each equation.

$$15) \sqrt{\frac{x}{2}} = 0$$

$$16) -4 + \sqrt{n+4} = 4$$

Solve each equation by taking square roots.

$$17) -6n^2 = -486$$

$$18) a^2 + 9 = 18$$

Solve each equation and tell how many solutions it has.

$$19) 2x + 4 = 2(x - 3)$$

$$20) 8r - 5r = -15$$

$$21) v - 4 - 2 = -10$$

$$22) 6x + 5 - 2x = 4 + 4x + 1$$

$$23) -3k + 21 = 3(7 - k)$$

$$24) 1 + 2x - 2x = -1$$